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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,060	07/14/2003	Kristen K. Hedstrom	1652.2003-003	6899

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HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

NOVOSAD, CHRISTOPHER J

ART UNIT PAPER NUMBER

3671

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/619,060

Applicant(s)

HEDSTROM ET AL.

Examiner

Christopher J. Novosad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-22, 46 and 48 is/are allowed.
- 6) ☒ Claim(s) 1, 7-11, 23-45 and 47 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/12/03 (2 SHEETS).
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Withdrawal of Restriction Requirement

The Restriction Requirement made in the previous Office Action, dated April 19, 2004 is withdrawn in view of the reasons given in Applicants' traverse, dated July 21, 2004.

Abstract

The abstract is objected to because it includes more than one paragraph.

Specification

The disclosure is objected to because of the following informalities:.

In page 3, the sentence in lines 18-20 is not clear. Clarification may be made, e.g. by inserting --, and-- after "angle" in line 19.

In page 4, line 10, --of-- should be inserted after "section" as a minor grammatical correction.

In page 4, line 20, "30B" should be corrected to --20B--.

In page 5, line 25, "2176" should be corrected to --216--.

In page 5 the specification, in describing Figs. 2A-2C, does not refer to the numeral "131" or to the element this numeral denotes.

In page 6, line 23, the numeral "136" apparently should be --316--, and in line 24, the numeral "319" referring to the "dome coupler" apparently was meant to be --339--instead.

In page 7, line 2, apparently "FIG. 2" was meant to be --FIG. 3--.

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In page 7, line 22, "terminated" should be corrected to --terminate--.

In page 7, line 25, "40" should be corrected to --400--.

Appropriate correction is required.

Claim Objections

Claim 46 is objected to because in line 2, "chamber" (1st occurrence) should be amended to --chambers-- to correct a grammar error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-33 and 35-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 1 of each of these claims, the recitation of "The leaching field" has no proper antecedent basis in the respective independent parent claims 23 and 34.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7-11, 23, 29-33, 45 and 47 are rejected under 35 USC 102(b) as fully anticipated by Daly *et al.* (USP 5,669,733).

Regarding independent claims 1, 23, 45 and 47, Daly *et al.* disclose a coupler and method of making same (angled adapter 18, Figs. 1 and 5) for connecting a pair of like corrugated (col. 3, lines 23-29) chambers (12), comprising:

a mating feature (female collar 126 with knob-like protrusions 128) to mate with a first chamber (12), and a mating feature (a male collar 130 having apertures or protrusions 132, Fig. 5) to mate with a second chamber (12); and

an adjustment feature (122,124, Fig. 5) for adjusting the angle between the first chamber (12) and the second chamber (12) within a range of angles.

Daly *et al.* (col. 4, line 67 to col. 5, line 3) disclose that the coupler (adapter 18) is engageable with either end of chamber sections (12) so that the collars may be reversed, if desired, to change the direction angle of flow, and (col. 5, lines 4-11) that the preferred angle of 22.5° may vary depending on the preference of the user. The above teachings in Daly *et al.* clearly meet the broadly-recited "adjustment feature...for adjusting the angle...within a range of angles."

With respect to claims 7 and 29, the "adjustment" feature of Daly *et al.* is considered to be "bidirectional" as broadly recited in these claims.

Regarding claims 8, 9, 30 and 31, note in Daly *et al.* (col. 6, lines 2-4) that the adapter coupler angle of 22.5° is particularly advantageous in that the adapter couplers (18) can be chained to create 45° to 90° , and other common angles.

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As to claims 10 and 32, each of the adapter couplers (18) of Daly et al, with the above-noted mating and adjustment features disclosed, necessarily provides a "third chamber" as broadly called for in the claim.

With respect to claims 11 and 33, the leaching chambers (12) of Daly et al are made of plastic (polyethylene, col. 2, line 40). Similarly, the adapter couplers (18) can be made of plastic, i.e. formed by injection molding with suitable molds (col. 5, lines 59-62).

Allowable Subject Matter

Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 35-44 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 12-22, 34, 46 and 48 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Evans (US Patent No. 6,120,209) could have been applied as art but has not been to avoid undue multiplicity. Specifically, the pipe section 200 has flexibility in the horizontal plane

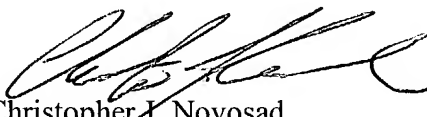
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259 which permits bending as illustrated in Fig. 39. Each pipe section 200 could be considered a coupling between other pipe sections 200.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Novosad whose telephone number is 703-308-2246. The examiner can normally be reached on Monday-Thursday 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached at 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher J. Novosad
Primary Examiner
Art Unit 3671

August 9, 2004